

### ALBANIA LIVESTOCK SERVICE CENTERS PROJECT



**USAID Grant 182-G-00-00-00102-00** 

**Final Report** 

2000 - 2006

Submitted to USAID/Tirana

Submitted by Land O'Lakes, Inc. P.O. Box 64281 St. Paul, Minnesota 55164 USA

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Strategic Objective 1.3: Growth in Number of Self-Sustaining Private Enterprises

**July 2006** 

# ALBANIA LIVESTOCK SERVICE CENTERS PROJECT USAID GRANT 182-G-00-00-00102-00 LAND O'LAKES, INC.

## FINAL REPORT 2000 - 2006

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Land O'Lakes, Inc.

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## FINAL REPORT 2000 - 2006

#### 1. OVERVIEW

Dates of project: April 17, 2000 – April 30, 2006

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The Livestock Service Centers project is a follow-on activity to the Land O'Lakes Dairy Improvement Campaign that assisted 8,280 dairy producers, of which 97 percent were women, as well as 604 male shepherds and 63 dairy processors from over 85 villages. The Livestock Service Centers project addresses **Strategic Objective 1.3: Growth in Number of Self-Sustaining Private Enterprises** with emphasis on the rural agriculture sector.

The first phase of for this project was to establish livestock service centers and the grant covered the time period from April 2000 to April 2003. In August of 2002, Land O'Lakes was awarded the second phase of this project that focused on improving processing and marketing, specifically developing and implementing the Seal of Quality. The second phase originally covered the time period from April 2003 to April 2005, and the project was given a one-year, no-cost extension and changed from a Grant to a Cooperative Agreement in April 2005.

#### 2. PROGRAM HIGHLIGHTS AND LESSONS LEARNED

### 2.1 Highlights

- Significant improvements in dairy herd genetics
- Size of a commercial farm herd increased from five head to more than 40 head
- Expanded and strengthened network of 120 artificial insemination technicians
- 844 farmers trained on various farm management and technology topics
- Measurable fat content increase (from 1.7 percent to 3.7 percent) in raw cow's milk
- 60 dairy and meat processing companies advanced their quality management systems
- Ten (10) dairies and five meat plants implemented the Good Manufacturing Practices and Good Hygiene Practices
- Established the high food quality standards for dairy and meat industry (Seal of Quality program)
- Increased the Seal of Quality program participation to 11 companies and 30 products
- Built and increased the Seal of Quality program awareness among consumers from 21.3 to 48.2 percent
- Made significant contributions in establishing food market research capacity in Albania
- Established and developed rural financing capacity via 15 credit unions

#### 2.2 Lessons Learned

#### 2.2.1 Loan Guarantee Program Management

It is crucial for a loan guarantee program to contain a solid default prevention and loan collection mechanism. The loan guarantee program established by Land O'Lakes and the American Bank of Albania (ABA) provided a 100 percent collateral guarantee for loans. Despite the overall program success, there were eventual payment delays and loan defaults by credit recipients. The loan agreements were entered into by ABA and loan recipients, which prevented Land O'Lakes from assuming a stronger legal stand and effect necessary legal actions with a court and regional bailiff's offices. The bank's exposure was covered by the 100 percent collateral guarantee. Logically, ABA proceeded to draw funds from the loan guarantee program and limit its further exposure by careful selection of loans for feasible collections process. Had there been a less-than-100 percent guarantee of loan collaterals, ABA might have been more motivated to pursue the loan collections earlier in the process. This would have helped to establish a collection precedent for other defaulting borrowers.

For future loan guarantee program management, Land O'Lakes should negotiate a 50 to 75 percent collateral guarantee with a lending institution. In addition, a collection process should be clearly outlined in the bank agreement, identifying responsibilities of Land O'Lakes, the lending institution, and loan recipients. This will improve risk management in a loan guarantee program and ensure that necessary legal actions are taken immediately.

In addition, Land O'Lakes should require a dedicated resource available at a lending institution for final loan approval. This resource is essential for financial analysis of business plans and minimizing client's default risk. The dedicated staff should establish periodic reviews of client's financial statements to avoid delays in initiating the collections process.

#### 2.2.2 Seal of Quality Program Sustainability

The Seal of Quality (SOQ) program in Albania achieved significant quality improvements in the dairy and meat processing industries. However, the three year program was not sufficient to ensure full financial sustainability of such key elements as the Food Quality Control Laboratory and technical advisory services. The Albanian Dairy and Meat Association (ADAMA) is facing a challenge of SOQ financial management. In addition, Land O'Lakes' experience in managing a similar SOQ program in Macedonia demonstrates that a much longer program duration may not necessarily assure sustainability.

It is essential to view a SOQ program as a necessary intermediary step towards higher, internationally-recognized quality systems and standards like HACCP and ISO. Land O'Lakes should view a SOQ program as a shorter-term (approximately two to three years) technical assistance initiative, which establishes an in-country capacity for high food processing standards, develops consumer awareness of food quality, and builds appropriate distribution conditions. Success of a SOQ program should be measured in the results of technical assistance provided, leading up to implementation of HACCP or ISO standards by individual companies, product sales increases, and changes in consumer attitudes and perceptions toward food quality. Full financial SOQ sustainability should not be the final program goal.

#### 2.2.3 Association Management

Land O'Lakes established and developed two livestock producers and food processors associations in Albania. These associations encapsulate the critical in-country capacity for future growth and improvement of the livestock and food industry. For the duration of the Livestock Service Centers project, Land O'Lakes made essential contributions in training and development of the associations' management staff and boards of directors. The lesson learned in this task is that it is important to involve an association board in making critical decisions, including nomination of an executive director and strategic planning of an association's activities. It is advisable to clearly separate the project and association staff, to eliminate the perception of Land O'Lakes' "holding an association's hand." This was successfully demonstrated in continued success of the Livestock Entrepreneurs Association of Albania (LEAA) management, which had the executive director focus fully on the association's business activities.

A stronger effort should be made in the future to ensure that an association's board of directors has frequent communication with the Land O'Lakes project's management. This would enable Land O'Lakes to effectively diagnose any existing strategic weaknesses and prepare the board to successfully manage the association after the project closeout.

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#### 3. ACTIVITY SUMMARY

#### 3.1 Phase I: Establishment of the Livestock Service Center, April 2000 – April 2003

The Dairy Campaign Development, a USAID-funded project managed by Land O'Lakes, provided support and assistance to the Albanian dairy sector from 1993 to 1999. The previous activities delivered valuable technical information to producers and processors resulting in an increased capacity to produce higher-quality milk and dairy products. The achievements and successes of these past activities led to another three-year project funded by USAID. Land O'Lakes started the implementation of the Livestock Service Centers Program in April 2000. The purpose was to provide producers and small entrepreneurs with a mechanism through which they could increase production, efficiency and economic viability.

The Livestock Service Centers were established around the milk collection centers, which served as the basis to develop more services for dairy farmers. Sixteen centers were established in Shkoder, Durres, Kavaje, Lushnje, Fier, Berat, Elbasan and Korçe districts. Their operations include the following range of services:

- Compound Feed
- Seeds
- Vaccines and Veterinary Services
- Artificial Insemination
- Livestock Inputs (buckets, syringes, gloves etc.)
- Licking Stones
- Vitamin and Mineral Premixes
- CMT Tests



Interior of a Livestock Service Center in Durres district

#### 3.1.1 Milk Collection Stations

The project continued to establish milk collection stations, creating a quality-differentiated market for dairy producers' milk. Technical assistance and training were continuously provided to milk collectors on raw milk quality tests, hygiene and sanitation, use of the differentiated milk pricing system based on quality, business management, and equipment maintenance. Significant improvements in the raw milk quality were evidenced and the quantity of milk collected by these collection stations increased tremendously. Dairy processing plants were supplied with higher amounts of higher-quality milk.

#### 3.1.2 Processing Plants

Technical assistance and training were provided to a large number of dairy processing plants. The focus of training shifted to topics related to business development. During the Dairy Development Campaign phase of the project, Land O'Lakes assisted processors in improvement of basic hygiene conditions and building reconstruction. At that time, there were no dairy factories in Albania and processing was done by very small and primitive units ("baxho"). As the dairy processing industry was making significant progress, Land O'Lakes focused its technical

assistance and training during 2000-2003 on other important issues related to equipment upgrade, hygiene and sanitation, technology improvement, business management, final product quality, new product development, etc. Close to 60 dairy plants received technical assistance on the abovementioned issues. A list of all ADAMA dairy and meat processors assisted is in Appendix D.

#### 3.1.3 Credit Unions

During this project phase, the credit union team intensified efforts to establish credit unions in the areas of project activity: Lushnje, Berat, Fier, Elbasan, Korçe, and Pogradec districts. The team established 15 credit unions, which registered as legal entities and provided members with loans. Members were given small-size loans of \$300 – \$500 to meet their household needs. Several training sessions and other assistance were provided to all unions on the following organizational and operational issues: Board of Directors, Credit Committee, Supervisor Committee, Treasurer, Financials, Loan Procedures, etc. Training, regional seminars and exchange visits were organized in and outside Albania for the credit union members to improve their knowledge and strengthen the activity.

#### 3.1.4 Association Development and Strengthening

The project continued to develop and support both the Albanian Dairy and Meat Association (ADAMA, formerly referred to as Dairy Entrepreneurs National Association, or DENA) and Livestock Entrepreneurs Albanian Association (LEAA), aiming to strengthen and transform them into sustainable organizations. Training was organized for the boards of directors on organizational, leadership, capacity building, planning and financial issues. In addition, the project enabled the associations to participate in roundtable discussions of their counterparts outside Albania.

During this period, the project assisted the associations in starting business activities to serve and meet members' needs for livestock and dairy inputs (pregnant heifers, bovine semen, cooling tanks, chemicals, starters and cultures, packaging materials, etc.).

Special emphasis was placed on the government lobbying process. The associations' board of directors and committees were assisted, supported and trained on lobbying techniques. A vital lobbying process was established to effectively represent the associations' members' interests in front of the Albanian Government, Ministry of Agriculture and Food, Ministry of Finance, General Directorate of Tariffs and Taxes, etc. Lobbying issues included reduction of customs tax on imported equipment, negotiation for fiscal package, and negotiation for VAT on raw milk.

#### 3.1.5 Credit Sources

With support from USAID, Land O'Lakes established a loan guarantee fund at the American Bank of Albania (ABA). This fund provided additional guarantee for loans to ADAMA and LEAA members, which enabled them to invest in business development and modernization and increase profitability. Credit committees were set up at both associations to approve loan requests and business plans. Loan sizes varied from \$10,000 to \$100,000. The guarantee fund made a great impact on the livestock production and processing industry, as there were no credit sources available for agricultural loans. Loans were used to purchase dairy cows and modern

processing equipment and increase the production capacity, as well as improve the technology and quality of dairy products.

#### 3.1.6 Training Centers

Land O'Lakes supplied equipment for the Dairy Room at the Technical High School of Tirana. This intervention was undertaken to better meet the training requirements of the dairy industry. The Technical High School students practiced dairy processing technologies for different types of cheese and other dairy products under proper hygienic conditions. The Dairy Room provided an opportunity to train students and prepare highly-qualified future workers for the dairy industry. In addition, the Technical High School trainers were able to upgrade their knowledge and expertise and improve the quality of their technical instruction. The Dairy Room was also used to organize training courses for dairy processors, project beneficiaries and association members.

Another dairy training center was established in Tepelene, in the south of Albania. The purpose of the center was to serve the dairy processing training needs of multiple small plants and baxhos. Due to the remote location of these processing units, there were no other viable options for technical training of their personnel. Land O'Lakes supplied a small-scale dairy processing line, while PARSH, another foreign aid project, supplied equipment for the cooling chamber.

#### 3.2 Phase II: Albania Seal of Quality, April 2003 – April 2006

The Seal of Quality program was implemented during the last three years of the project extension with both dairy and meat processing companies. This ambitious program focused on establishment and implementation of voluntary high-quality and safety standards. The main goals of the program were:

- Improve quality and safety of dairy and meat products
- Increase competitiveness and profitability of dairy and meat industry businesses in the local market
- Prepare dairy and meat industry businesses to export local products in the near future
- Increase consumer awareness of food quality and safety issues

By the end of January 2005, a new set of indicators was agreed upon to track progress for the final year of the project as the previous indicators were met. The abovementioned goals were closely related to support, technical assistance and training of the following target groups:

#### 3.2.1 Dairy Producers

Intensive technical assistance and training was provided to dairy producers in order to secure high-quality raw milk for processing plants. The LEAA association staff led the assistance and training provided to this group. Interventions undertaken by LEAA fall into the following areas of activity:

- Supply of dairy farmers with high-quality genetics (imported pregnant heifers and bovine semen) to increase raw milk production and improve its quality
- Establishment of the artificial insemination (AI) technicians network to provide dairy farmers with AI service

- Support with loans to increase herd size and establish commercial farms
- Technical assistance and training on farm management, feeding, reproduction, animal health, silage preparation, forage cultivation, animal housing, etc.
- Information development and delivery
- Raw milk sampling and tests for quality control

#### 3.2.2 Dairy and Meat Processors

The leading dairy and meat processing plants were selected to implement the Seal of Quality (SOQ) program. A total number of 11 plants (six dairies and five meat processing plants) in the districts of Tirane, Shkoder, Korçe and Lushnje participated in the program. Within three years, a total of 30 dairy and meat products were certified with the Seal of Quality.

The implementation methodology aimed to support not only industry leaders, but also the less-developed dairy and meat businesses, in order to help them upgrade their facilities and qualify them for participation in the Seal of Quality program in the future. Approximately 30 dairy and meat plants were classified into three groups based on their operations' condition and technical capacity. Different levels of training and technical assistance were provided to them.

The process started with the implementation of Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP), which are considered the prerequisite programs for the implementation of any quality management systems. High-level technical assistance was provided to SOQ-seeking plants, including technology, marketing and quality testing services, in order to secure achievement and maintenance of the quality and safety standards. Training in and outside Albania was organized for SOQ applicants during the last project extension to enhance their understanding of the European and international quality and safety requirements.

A merchandiser team was hired and trained by Land O'Lakes to organize promotional activities and stimulate consumer and retailer demand for the SOQ products. The merchandisers also represented a valuable link between processors and retail marketplace, providing information and feedback to processors.

#### 3.2.3 Evaluation Board and Seal of Quality Procedures

An independent SOQ Evaluation Board, comprised of the best food control experts in Albania, was established to certify dairy and meat products with the Seal. Specific procedures were drafted and approved to ensure correct and consistent implementation of the program. These procedures included the steps outlined on the following page.

- Preliminary plant inspection and evaluation
- Preparation of plants, technical assistance, on-thejob training, lab tests – the pre-qualification phase to meet the quality and safety standards
- Official testing of products for nine consecutive weeks
- Official plant inspection
- Final product certification at the Evaluation Board meeting
- Monthly tests for SOQ products to monitor quality and maintain their Seal award

The final product assessment was conducted by an independent board of evaluation comprised of seven members which included representatives of the Food Control Infrastructure; the Ministry of Agriculture and



Seal of Quality Certification
Process

Food; the Agriculture University of Tirana; the General Directorate of Standards, the Veterinarian Research Institute; the Public Health Institute; and, the Food Research Institute and the Consumer Association. After receiving the Seal, the dairy and meat products were checked monthly to verify that the standards are maintained. All the physical-chemical tests and microbiological tests were performed at the Laboratory of Quality Control.

During this extension, Land O'Lakes established the first independent Food Quality Control Laboratory in Albania. The laboratory performs a wide range of physical-chemical and microbiological tests for dairy and meat SOQ-nominated products. Currently, the laboratory is awaiting accreditation on National Level by the Directory of Accreditation/Ministry of Economy. It will be the first entity accredited in Albania.

The Seal "Quality Product, ADAMA" and the slogan "Eat Well, Live Well" are registered as trademark in the General Directorate of Patents and Marks. The ADAMA association owns the trademark and administers the SOQ program.

#### 3.2.4 Consumer Awareness Campaign

Project interventions focused on educational campaigns aiming to increase consumer awareness of quality and safety issues, while stimulating demand for high-quality products and promoting the SOQ dairy and meat products. Several kinds of activities were organized to serve this goal:

- SOQ Launch campaign
- Radio advertising
- TV advertising
- In-store promotions
- Factory promotions
- Open market promotions
- Food Fair participation

- Roundtables on "Raw Milk Quality", "Pasteurized Milk Consumption and Use"
- Seminars on "Food Safety and Ouality"
- TV and radio interviews
- Newspapers articles

The project completed two market research studies on the SOQ consumer awareness. Results of both studies demonstrate a significant increase in consumer awareness and purchase intent related to the SOQ products.

#### 3.2.5 Associations

Both ADAMA and LEAA associations were derived from the former National Association of Dairy Businesses formed in February 1997. The project viewed these organizations as crucial for developing in-country capacity, and strongly supported both associations since their establishment. To date, both associations are equipped with the essential assets and tools to function independently. These entities are legally registered in the Tirana Courthouse and hold a NIP number, which allows them to perform economic and business activities to develop, maintain, and provide services to members.

The associations' technical staff is comprised of the most talented former Land O'Lakes employees with high levels of knowledge training and expertise in their respective areas. ADAMA and LEAA are governed by voluntary boards of directors, which are the decision-making bodies.

In addition to member services, both ADAMA and LEAA are involved in the lobbying process and have established productive working relationships with several governmental institutions. They are active in organizing roundtable discussions, seminars and workshops, where issues of importance for members' interests are reviewed and discussed. The Ministry of Agriculture, Food and Consumer Protection regularly invites the associations to participate in working groups and considers ADAMA and LEAA partners.

#### 4. PERFORMANCE RESULTS AND IMPACT

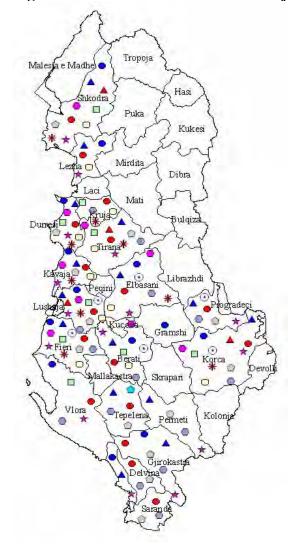
Over the life of the project several indicators were used to measure the project's results. The indicators changed as the Albania/USAID Results Framework and Performance Indicators changed. Table 1 on the next page shows the indicators used during the majority of the project and the indicators used during the project's extension. Figure 1 also shows the program's impact throughout Albania. The following sections also describe the program's impact on dairy producers, dairy processors, and credit unions. Appendix A lists results achieved for different beneficiaries: dairy producers, processors, credit unions and dairy and livestock organizations; and Appendix B recaps several program success stories.

Table 1. Performance Indicators, 2000 – 2006

$\mathbf{S}$	FRATEGIC OBJECTIVE: Growth of Self-Sustaining Private Ente	rprises
1	Number of self-sustaining private enterprises benefiting	206
	directly from USAID assistance.	
2	Number of self-sustaining private enterprises benefiting	10,000
	indirectly from USAID assistance.	
4	Value (in leke) of target Albanian products and services	18,198,000 leke
	exported by USAID assisted enterprises.	\$178,412 <sup>1</sup>
IF	R 1: Competitiveness Capacity of Assisted Enterprises Strengthene	d
1	Number of assisted enterprises which increased productivity	17
	and/or improved quality of products and services.	
2	Number of assisted enterprises that implement a marketing	9
	strategy for their products and/or services.	
Sı	ıb-IR 1.1: Access to New Technologies Increased	
	Number of assisted enterprises adopting one or more new	17
	technologies that enhance their productivity or quality of their	
	product(s) or service(s).	
Sı	ıb-IR 1.2: Management Skills Increased	
	Number of assisted enterprises applying best management	13
	practices.	
Sı	ıb-IR 1.3: Marketing Skills Increased	
	Number of assisted enterprises able to develop a written	9
	marketing strategy.	
IF	R 2: Access of Assisted Enterprises to Financial Resources Increased	d
1	Number of loans to assisted enterprises from commercial	76
	banks.	
2	Number of loans to assisted enterprises from non-bank sources.	669
3	Value of loans granted to assisted enterprises from commercial	131,633,500 leke
	banks.	\$1,290,525 <sup>2</sup>
4	Value of loans granted to assisted enterprises from non-bank	60,343,200 leke
	sources.	\$591,600 <sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Exchange rate \$1 = 102 leke <sup>2</sup> Exchange rate \$1 = 102 leke <sup>3</sup> Exchange rate \$1 = 102 leke

Figure 1. Livestock Service Center Project's Impact on Albania



* LEAA members	200
Artificial Inseminators	120
Feed Mills	12
Small Ruminants	1835
Farm Service Centers	16
▲ Meat Plants	9
Dairy Plants	44
<ul><li>Commercial Farms</li></ul>	137
<ul><li>Milk Collection Centers</li></ul>	50
★ ADAMA members	33
<ul><li>Credit Unions</li></ul>	9
Training Centers	2
Dairy Network	10863

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### **4.1 Improved Herd Genetics**

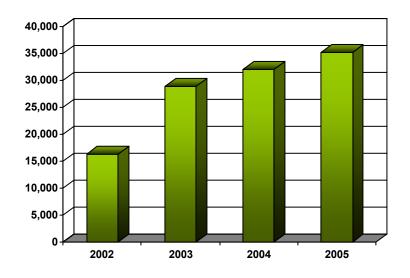
From October 2002 through April 2006, LEAA imported 140,000 doses of bovine semen from World Wide Sires, of which 76,800 doses were Holstein; 21,200 Charolais; 32,000 Limousine; 8,000 Jersey; and 2,000 Simental. Data on doses, breed, and time imported are provided in the Table 2 below.

Table 2. Bovine semen sales, 2002 – 2006

No.	Total amount	Amount by breed	Period
	(doses)	(doses)	
1.	10,000	8,000 Holstein	October 2002
		2,000 Jersey	
		10,000 Holstein	
2.	15,000	3,000 Charolaise	January 2003
		2,000 Limousine	
		18,000 Holstein	
3.	30,000	10,000 Limousine	August 2003
		2,000 Charolais	
		25,000 Holstein	
4.	50,000	15,000 Limousine	July 2004
		10,000 Charolais	
5.	5,000	5,000 Jersey	July 2005
6.	30,000	15,800 Holstein	
		6,200 Charolais	
		5,000 Limousine	January 2006
		2,000 Simental	
		1,000 Jersey	

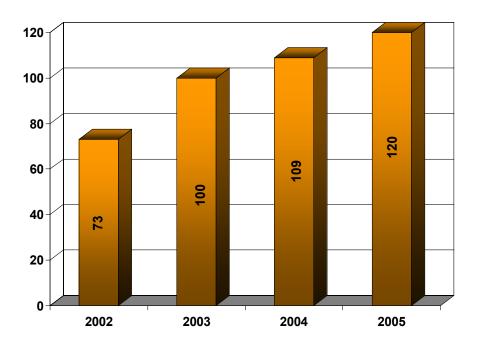
There has been a considerable increase in bovine semen sales starting from 2002 to-date as shown in the graph below.

Graph 1. Semen sales increase, 2002 - 2006



12

The number of technicians operating through LEAA's network increased from 73 in 2002 to 120 in 2006, while the number of key semen distributors increased from three (Shkoder, Lushnje, Fier) in 2003 to nine (Shkoder, Lezhe, Durres, Lushnje, Fier, Gjirokaster, Korçe, Devoll, Erseke). The increase in the number of inseminators operating under LEAA's network is provided in the following Graph 2.



Graph 2. Number of AI technicians increase, 2002 - 2005

Five training courses were organized to train 57 Artificial Insemination (AI) technicians, in cooperation with the Livestock Research Institute. Training topics included the anatomy and physiology of reproduction, fecundity, heat detection, practical aspects of insemination (i.e., recto-cervical method), manipulation with reproduction organs, optimal moment to apply AI, handling of frozen semen, container care and maintenance, assessment of reproduction conditions in dairy cows, birth and problems related to it, assessment of pregnancy, semen evaluation, etc. Table 3 is the summary of the artificial insemination training courses.

Table 3. AI training courses, 2003 – 2005

No.	Date	Location	No. of participants
1	July 21-26, 2003	Lushnje	14
2	March 29 – April 3, 2004	Lushnje	8
3	November 10 – 14, 2004	Diber	15
4	April 4-9, 2005	Korce	8
5	September 19-23, 2005	Tirana	12
	TOTAL		57





Displays, attendees and general session snapshots of the Symposium on Cattle Breed Improvement

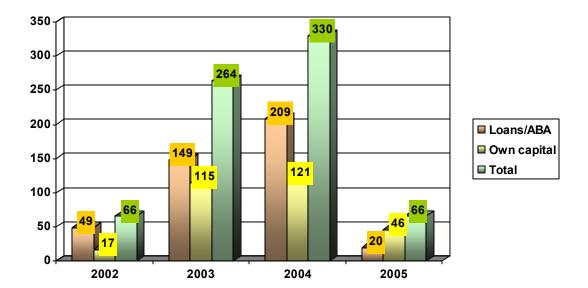
#### 4.2 Increased Herd Size

Since late 2002, LEAA provided direct technical assistance to 98 commercial farms managing either imported or local cows. The definition of a commercial farm has been related to the number of cows managed by farmers, and evolved from five cows per farm in 2002-2003 up to currently more than 40 cows. Table 4 below represents the supported number of commercial farms according to herd size.

Table 4. Number of farms assisted

Farm size (herd size)		Number of farms	
No.			
1.	Above 40	5	
2.	30 to 40	4	
3.	20 to 30	12	
4.	10 to 20	55	
5.	5 to 10	22	
	TOTAL	98	

Eighty-five farms have been supported with access to imported Holstein cows and an entire package of technical assistance to manage them. Seven hundred and twenty-six heifers have been imported from Germany. Of that number, farmers purchased 427 heifers through loans and 299 heifers with cash. Graph 3 on the following page shows the annual imports of heifers.



**Graph 3. Annual imports of heifers, 2002 - 2005** 

## 4.3 Improved Herd Health and Farm Management Through Training, Technical Assistance and Exchange Visits

Since early 2003, LEAA trained 844 farmers on various technical topics. A list of training materials is in Annex C. Training and Communication Materials.

#### Feeding:

- Cow feeding before and after calving
- Feeding ratio
- Feeding supplements (minerals, vitamin)
- Cultivation of forage crops
- Cultivation of corn for silage
- Corn silage preparation and manipulation
- Spring silage
- Processing of roughage foods

#### Health issues and reproduction:

- Cattle poisoning
- Mastitis diagnosis and treatment
- Hemogloburina
- Ketosa
- Animal reproduction

#### Milking:

- Milking technique and hygiene before and after milking
- Use of cleaning solution for milking machines
- Teat massaging and hygiene
- Use of disinfection cups

#### Hoof trimming:

- Anatomy of a hoof
- Use of hoof trimming equipment and tools
- Use of disinfectant preparations

#### Barn construction:

- Barn orientation
- Barn types and sizes
- Open space

Frequent field visits to target farmers have been used to provide technical assistance and one-to-one support on different cow management issue, such as:

- Animal health conditions, hygiene, water use
- Feeding in general and its importance for milk production; feeding in different stages of lactation and dry period; fodder availability, gradual use of spring grass and its combination with dry fodder; appropriate preparation time for silage; importance of silage compression and how to manage it; corn cutting size, use of salt in silage; use of mineral blocks, and vitamins, use of sunflower bran in feeding ratio
- Record keeping, milk production and reproduction aspects
- Milk cost, farm economic analysis
- Information on price and availability of corn meal, soy meal, wheat bran, sunflower bran, etc.

Through exchange visits organized by LEAA, it was possible to demonstrate progressive experiences to over 300 participants in the following activities:

- Eleven LEAA members have exchanged their experience with members of Macedonian Small Ruminant Association, visited small ruminant farms, slaughter house, veterinary service, and breed improvement institute.
- Fourteen farmers from Korçe visited Imported Holstein farms in Shkoder, learning from their practical experience in managing such farms
- Twenty farmers from Shkoder visited their peer who manages 26 imported Holstein cows
- Fifteen farmers from Durres visited a farm in Berxull (Tirana) managing ten cows (seven local and three imported)
- LEAA hosted the Macedonian Small Ruminant Association and introduced visitors to the Small Ruminant Station in Korçe; dairy processing plant "Ajka"; Tirane dairy market; Livestock Research Institute; Veterinary Research Institute.
- Twenty-two participants (organized in two groups) attended training courses in Germany, mainly focused on general cow management, hoof trimming, milking, and visiting farms, cattle auction center, and DeLaval shops
- Thirty-two farmers from Elbasan and Korçe areas visited farm service center in Shijak and a Holstein farm
- Seventy-three farmers from Kavaje, Tirane, Elbasan, Durres, and Fier visited Zaka farm to learn about general dairy herd management and calf fattening experiences
- One hundred-and-twenty farmers and extension service staff attended field days on corn for silage and silage preparation in Shkoder, Lushnje and Korçe districts.

LEAA's board members attended the following training courses:

• Capacity building organized by Regional Development Agency supported by USAID/SBCA project

- Capacity building and exchange experience with Greek Livestock Association
- Association development and strengthening training course organized by Ms. Cheryl Bann, a Land O'Lakes consultant, and
- Association's vision and strategy training course organized by Ms. Cheryl Bann, a Land O'Lakes consultant.

#### 4.4 Increased Access to Credit for Farmers

LEAA prepared 60 business plans for different farms, of which 49 were approved by the American Bank of Albania (ABA) Board and resulted in loans granted to LEAA members. Table 5 below summarizes the LEAA members' loan history with ABA, considering the number of farmers and total amount of money received through loans each year.

Table 5. Amount of loans to farmers via ABA Bank, 2001 - 2005

No.	YEAR	FARMERS	AMOUNT (Lekë)
1.	2001	5	4,200,000
2.	2002	15	20,200,000
3.	2003	12	20,800,000
4.	2004	17	30,500,000
	TOTAL	49	75,700,000

In late 2004 and early 2005, the stellar loan repayment by LEAA members suffered a setback. With the Land O'Lakes project closeout in sight, some farmers decided to slow down the repayment process. Collection of these loans was a lesson learned by Land O'Lakes, ABA, and LEAA, as the existing banking, court, and bailiff system was slow to respond. Land O'Lakes, ABA, and LEAA put together a dedicated collection team and made huge progress prior to the LSC project closeout. With the Loan Guarantee Program management transferred to PShM, LEAA will continue to collect upon the outstanding loans with its members.

Loans provided through Opportunity International (PShM) mainly served to support farmer groups. In addition, there were cases where individual loans were provided.

Table 6. Amount of loans to farmers via PShM, 1999 – 2005

No.	YEAR	GROUPS	FARMERS	AMOUNT (Lekë)
1.	1999	28	161	12,840,000
2.	2000	50	277	22,750,000
3.	2001	13	64	5,340,000
4.	2002	24	111	9,540,000
5.	2003	12	57	8,140,000
6.	2004	8	33	2,900,000
7.	2005	0	3	3,600,000
	TOTAL	135	706	65,110,000

## 4.5 Improved Functioning of Dairy and Livestock Associations, Including Government Relations and Dairy Legislation for Dairy Sector

Successful government regulations and legislation effected included reduction of customs tax on imported equipment, negotiation for fiscal package, and negotiation for VAT on raw milk. Roundtable discussions such as Livestock Management Law and workshops helped solidify the two associations' positions in respect to the government.



Roundtable discussion on Livestock Law

In cooperation with GTZ, a Food Safety workshop was organized in Korçe, Shkoder and Tirane districts. The workshop sessions were attended by 90 representatives of Ministry of Agriculture and Food, local authorities, Agriculture and Food Directorate, Food Control Inspection, dairy and meat processors. The workshop focused on the following topics:



Food Safety Workshop in Korce

raw materials quality importance and impact on final product quality, food safety priorities for local governments, consumer awareness of product quality, and the Seal of Quality program.

In addition, ADAMA's board members attended the following training courses:

- Second association roundtable in Sofia Bulgaria, May 2000 with participation of three board members and the executive director.
- Association development and strengthening training course organized by Ms. Cheryl Bann, a Land O'Lakes consultant, in July 2003
- Association's vision and strategy training course organized by Ms. Cheryl Bann, a Land O'Lakes consultant in September-October 2005.

#### 4.6 Improved Raw Milk Quality

The cooling tanks program started in 1999. The main goal was improving the raw milk quality for the dairy processing industry. During the first year of the activity, 21 milk collection stations were established with cooling tanks and small lab equipment to test the raw milk quality. This activity initiated at the previous project phase was maintained in the following years. Sixty-nine milk collection stations containing a total of 89 cooling tanks were established in the districts of Lushnje, Berat, Fier, Elbasan, Kavaje, Korçe, Lezhe, and Shkoder.

Continuous technical assistance has been provided to the milk collection station managers and workers on the following topics:

- Raw milk quality tests
- Equipment use
- Business management
- Record keeping
- Hygiene and sanitation
- Quality-differentiated pricing

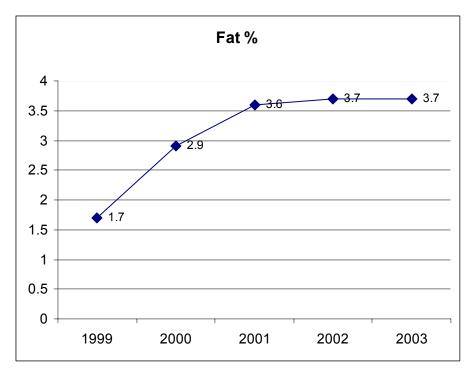
The impact of the program in the improvement of the raw milk quality has been continuously monitored. Table 7 and Graphs 4 and 5 show how the quality indices have changed through years.

Table 7. Milk quality improvement, 1999 - 2003

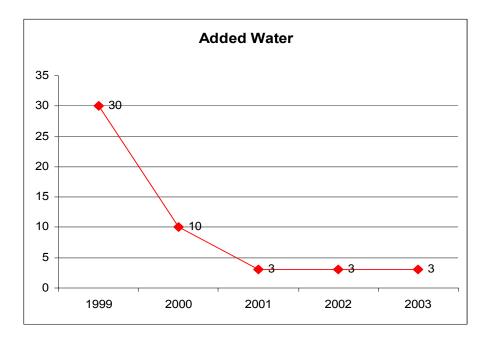
Indicator	1999	2000	2001	2002	2003
Fat (%)	1.7	2.9	3.6	3.7	3.7
Dry Matter (%)	6 - 6.5	7 - 7.2	8	8.4	8.4 - 8.5
Acidity ( <sup>0</sup> T)	22 - 23	19 - 20	18 – 19	18 – 19	18 - 19
Density ( <sup>0</sup> )	22 - 23	27	28	28	28 - 29
Added Water (%)	25 - 35	10	3	3	3

There was a significant improvement in the milk fat content in the first two years of the activity. At present, the milk fat content is maintained at the level which is normal for cow's milk. The added water quantity dropped significantly during the same period of time and shows the same improvements and trends in the recent years.

Graph 4. Percent fat in milk



Graph 5. Added water in milk



#### 4.7 Established Quality Standards and Introduced New Processed Products

Both Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP) are considered the prerequisite programs for implementation of Quality Management Systems, ISO and HACCP. For several years, Land O'Lakes provided support and technical assistance to approximately 60 dairy and meat plants on technology improvement, hygiene and sanitation, equipment upgrade, documentation, quality control, factory layout, etc. During the lifetime of the project, approximately 60 dairy and meat processing plants benefited from technical assistance in the following areas:

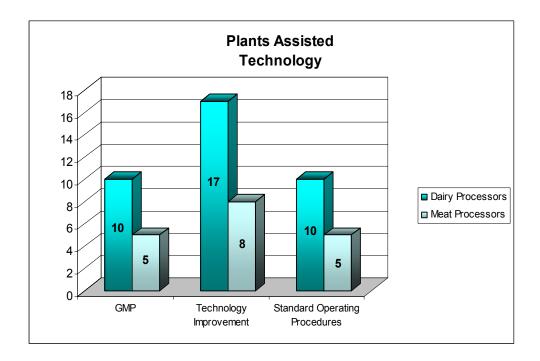
- Standard Operating Procedures
- GMP/GHP
- Technology of production
- New product development
- Documentation, log sheets
- Personal hygiene
- Water control
- Cleaning and sanitation

- Raw material control
- Equipment selection and procurement
- Plant layout
- Equipment
- Product standardization
- Product consistency



Land O'Lakes Technology Team Assisting Dairy Processors

In order to secure high levels of plant hygiene and sanitation, establish standard operation procedures and prepare dairy and meat plants to independently handle quality, safety and standards issues, the Land O'Lakes Technology team provided multi-faceted technical assistance to individual processors. Such interventions were considered as critical steps to further progress of the Seal of Quality program. The most important assistance areas and number of plants are shown in Graph 6. Appendix C. Training and Communications Material includes the processing training material developed.



Graph 6. Number of plants assisted by type of assistance

In early 2003, the Land O'Lakes project focused on GMP/GHP implementation at processing plants in order to prepare them for implementation of quality management systems. The implementation of GMP/GHP included the following areas:

- Raw Materials
- > Personal Hygiene
- > Production Hygiene
- ➤ Final Product Transportation
- ➤ Chemical Cleaning Process
- ➤ Line Cleaning and Sanitation

- ➤ Hand and Feet Disinfection
- > Standard Operation Procedures
- > Documentation and Log Sheets
- ➤ Internal Environmental (floor, ceiling, windows, toilets, etc.)

From 2003 to 2005, GMP/GHP programs have been implemented with 15 ADAMA member companies (ten dairy processing plants and five meat processing plants).

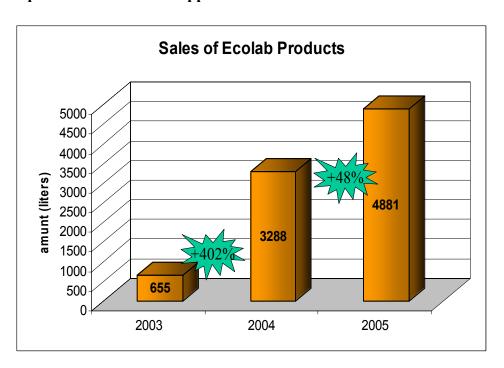
Based on Land O'Lakes' recommendations, all the abovementioned processing plants began using high-quality chemicals to clean and sanitize their processing lines in 2003. This was a very important element to ensure proper equipment cleaning, reduce the bacteria count to the minimum, and positively affect the final product quality and safety. Chemicals were procured from the Slovenia representative office of ECOLAB US Co. Foaming machines were introduced for sanitation chemical application.

ADAMA Clients Purchasing Ecolab Products

18
16
14
12
10
2003
2004
2005

**Graph 7. ADAMA clients purchasing Ecolab supplies** 

Graph 8. Sales of Ecolab supplies increased

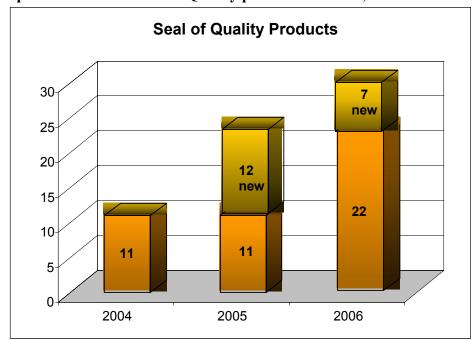


The 15 ADAMA members continued with the implementation of the Seal of Quality Program and are currently on various stages of certification completion, some with multiple products.

#### 4.8 Increased Sales Through Seal of Quality and Marketing Assistance

#### 4.8.1 Seal of Quality Sales

Eleven processing plants (six dairies and five meat companies) have completed the Seal of Quality program. A total of dairy and meat products have been awarded the Seal.



Graph 9. Number of Seal of Quality products increase, 2002 - 2006

The sales of the SOQ products have been continuously monitored. The following graphs demonstrate the year-on-year increase in value (leke) and quantity (kg) of total SOQ product sales.

14.463.2 14.158.5

15.895.5 15.922.5

19,333.6 16,632.0 14,067.2 15,603.1

Sales of SOQ dairy and meat products ('000 leke) 35,000.00 30.000.00 Quantity in thousands of LEK 25.000.00 2002 20,000.00 2003 2004 2005 15.000.00 2006 10,000.00 5,000.00 0.00 Jan Feb Mar May Jun Sep Nov

18,516.1 19,312.5 19,907.3 19,718.3 21,976.3 22,448.2 20,985.7 20,848.2 20,192.2 21,845.7

Graph 10. Product sales increase, 2002 - 2006

The Land O'Lakes Marketing Department developed the Seal of Quality logo design, which was formally approved by the Albanian Commercial Brand Directory. The Seal of Quality logo was incorporated into the packaging artwork of 23 out of 30 certified products to date. Manufacturers of the Seal of Quality products certified in 2006 are currently in the process of changing their packaging inventory to the new artwork design with the Seal.

21,631.1 | 25,247.0 | 29,667.5 | 31,097.0 | 32,267.4 | 29,234.0 | 25,858.0 | 27,301.6 | 31,133.7 | 28,836.9 | 26,164.6 | 26,292.0

Months

16,906.6 18,055.1 20,291.7 19,414.8 21,344.5 22,799.2

The Seal of Quality program was launched at the ADAMA Expo in November 2004. Following the program launch, two advertising and promotion campaigns (November 2004 – January 2005 and October – December 2005) were implemented by the Land O'Lakes Marketing Department, in order to raise awareness and stimulate demand for high-quality Albanian products among consumers, retailers, and various government agencies. The campaigns featured several promotion tactics: TV and radio advertising, billboards, point-of-sale materials, and product demonstrations.

Two Seal of Quality awareness market research studies (April 2005 and March 2006) were completed during the lifetime of the project. The purpose was to determine the effectiveness of the Seal of Quality campaign by measuring SOQ program and symbol awareness. The studies were conducted in the three main cities: Tirane, Shkoder and Korçe. A total population sample of 1,200 was selected for each study to ensure correctly weighted results with 95 percent confidence level with  $\pm$  5 percent tolerance.

2002

2003

14,746.8

2006 28,216.6

14.776.7 16.359.5

15,119.6

The study results demonstrate an increase in the SOQ program awareness from 21.3 percent following the winter 2004/2005 campaign to 48.2 percent following the fall 2005 campaign. Currently, 55.1 percent of Albanian consumers recognize the SOQ symbol, compared to 26.2 percent level following the first campaign.

Seal of Quality Consumer Awareness

60
50
40
30
20
21.3%
26.2%
Fall 2004
Fall 2005

Graph 11. Consumer awareness of Seal of Quality increase, 2004 - 2005

Over 90 percent of surveyed consumers choose a SOQ product over an imported product. Over 85 percent of consumers stated that they would pay more for a SOQ product versus an identical one without the Seal. In addition, respondents have a clear perception of SOQ meaning as follows:

Meaning of SOQ Symbol	Percent of Consumer Responses
<ul> <li>Quality</li> </ul>	48.0%
<ul> <li>Control</li> </ul>	19.2%
<ul> <li>Guarantee</li> </ul>	18.4%
<ul> <li>Quality &amp; Guarantee</li> </ul>	11.8%

#### 4.8.2 General Marketing Assistance

The Land O'Lakes Marketing Department provided various forms of marketing assistance to 11 current Seal of Quality program participants and 17 program applicants. Materials developed for marketing training and assistance are listed in Appendix C. Training and Communication Materials.

#### This assistance included:

- Packaging artwork and promotion materials design (incorporation of the Seal and required product information and promotional messages
- Label approval at the Ministry of Agriculture
- Branding
- Product promotion tactics and programs
- Distribution system evaluation and identification of new opportunities
- Recommendations for improving productivity and product quality maintenance along the entire cold chain
- Market data collection and analysis
- Strategic marketing plan development
- Marketing and distribution staff hiring process
- Refrigeration Unit Program
- Model retail outlet establishment
- Business plan preparation for loan applicants
- Ongoing marketing issues evaluation and recommendations
- Export market development through Global Trade Network

The Marketing Department partnered with GTZ to organize a televised roundtable discussion on "The Value of Pasteurized Milk Products" and produce a documentary via NetVision. In addition, it organized a series of animated presentations on the same topic at Tirana elementary schools, to educate young children on the consumption of milk. The presentations were enhanced with contests and other exciting elements appropriate for this young audience. The presentations were captured in a documentary produced by TVSh station.

Eight companies (four dairies and four meat processors) were assisted in development of strategic marketing plans. The main goal of this activity was to help processors analyze the market environment and trends and make business decisions leading to increased market share and business competitiveness. Final reports were produced and discussed with owners of processing plants and marketing managers.

The Marketing Department utilized the in-house talent and outside resources to conduct the following studies in Table 8.

Table 8. Market research projects, 2002 - 2006

Market Research Project	Date	Beneficiaries
	Implemented	
Quantitative (home surveys) – Set Yogurt	Q2 2004	Dairy Processors
Consumption		_
Qualitative (focus groups) - Set Yogurt	Q4 2003	Dairy processors
Consumption		
Quantitative (retail surveys) – Distribution	Q4 2003 - Q1	Dairy and meat processors
Opportunity Assessment	2006	
Quantitative (retail surveys) – Pricing Studies	Q 1 2003 – Q1	Dairy and meat processors
• • • • • • • • • • • • • • • • • • • •	2006	

Market Research Project	Date	Beneficiaries
	Implemented	
Quantitative (retail surveys) – Retail Outlet Classification	Q2 2003	Dairy and meat processors
Quantitative (retail surveys) – Tirana Zone 10 Retail Outlets Database	Q2 2003	Dairy and meat processors
Quantitative (sales database) – Seal of Quality Product Sales	Q3 2002 – Q1 2006	Dairy and meat processors
Quantitative (consumer surveys) – Consumption and Consumer Preferences for Set Yogurt and Pasteurized Milk	Q3 2003	Dairy processors
Quantitative (statistics data) – Dairy Industry Data Sheet	Q2 2003	Dairy processors, government agencies, donors, importers
Quantitative/Qualitative (product evaluation) – Seal of Quality Product Database	Q3 2002 -	Dairy and meat processors
Quantitative (product evaluation) – Raw Milk Quality Analysis	Q2 2003	Dairy processors, retailers, ADAMA
Quantitative (retail surveys) – Retailers' Refrigeration Needs	Q1 2004	Retailers, dairy and meat processors
Quantitative (statistics analysis) – Meat Imports	Q1 2004	Meat processors, importers
Qualitative (focus groups) – UHT Milk Preferences	Q2 2004	Klegen dairy company
Qualitative (retail surveys) – Product Sales and Distribution	Q3 2004	Bardhi meat company
Qualitative (consumer intercepts) – Pasteurized vs. Raw Milk Consumption	Q4 2004	Dairy processors
Quantitative (consumer intercepts) – Seal of Quality Awareness (Wave I)	Q2 2005	Dairy and meat processors, government agencies, donors
Quantitative (consumer intercepts) – Brand Perception Studies	Q2 2005	11 SOQ dairy and meat companies
Quantitative (retail surveys) – Yogurt Distribution Opportunity Analysis in Elbasan	Q2 2005	Greal dairy company
Quantitative (consumer intercepts) – UHT Milk Consumption	Q1 2006	Ferlat dairy company
Quantitative (consumer intercepts) – ISO Understanding and Awareness	Q1 2006	Dairy and meat processors
Quantitative (retail and foodservice surveys) – Specialty Cheese Market Assessment	Q1 2006	Dairy processors, ADAMA, LEAA
Quantitative (consumer intercepts) – Seal of Quality Awareness (Wave II)	Q1 2006	Dairy and meat processors, government agencies, donors

Promotional activities were organized for all 11 dairy and meat companies participating in the Seal of Quality program. The activities included:

- In-store promotions organized in the main cities of Albania, which served as the main SOQ product markets (Shkoder, Korçe, Tirane, and Elbasan). The goal of these interventions was to promote the SOQ dairy and meat products and stimulate consumer demand, leading to sales increase and market share expansion.
- Open-market promotions product sampling organized in Korçe, Shkoder, Elbasan, and Tirane.



Seal of Quality product promotions at open markets

 Factory promotions – organized with female employees of several apparel and shoe factories in Tirane and Shkoder, aiming to increase consumer awareness of quality and safety products and stimulate demand for SOQ products.



Seal of Quality product promotions at factories

- Food Fairs promotional activities organized at food fairs to promote SOQ dairy and meat products and increase consumer awareness on quality and safety issues.
- Second Dairy and Meat EXPO in November 2004 The event was attended by approximately 1,500 visitors. Among participants were 20 ADAMA dairy and meat processing members (including eight SOQ companies), which had an opportunity to exhibit their products. EcoLab-Slovenia, supplier of chemicals and sanitizers, and Berdica Co., supplier of cultures and starters, participated in the EXPO. The highlight of the EXPO was the SOQ awarding ceremony for eight dairy and meat plants certified with the Seal of Quality. The following list represents the sponsors of the EXPO:
  - Gold Sponsors Tirana Bank, ABA and Reifeissen Bank
  - Bronze Sponsors GTZ, Harry Fultz Community College, International Commercial Bank, and PShM.



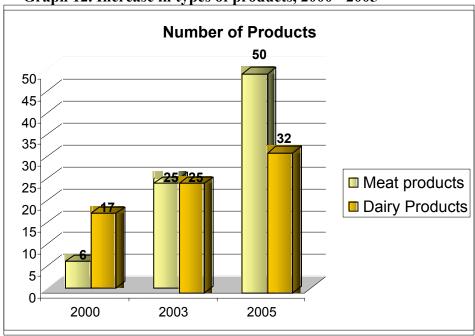
ADAMA Meat and Dairy EXPO - 2004

#### 4.9 Introduced New Products

One of the program's goals was to diversify product portfolios and increase the number of products developed at dairy and meat processing plants. At the beginning of project activities, most dairy processors were producing a very limited range of similar dairy products (five to six products). Currently, most processors doubled the number of products manufactured in their operations. The number of dairy product varieties produced by the Albanian dairy industry exceeded 30.

The meat processing industry demonstrates a similar trend. In 2000, an average meat factory manufactured only five to six processed meat products. Currently, meat processing plants handle more than 50 different types of processed meat products at their operations.

Graph 12 shows an increase in product portfolio size in the dairy and meat processing industries. Graph 12. Increase in types of products, 2000 - 2005



#### 4.10 Established First Independent Food Quality Testing Laboratory

The laboratory of Quality Control was established in 2003 and began conducting tests in March 2003. The lab tests for food safety and quality and is equipped with all required equipment and test kits for development of required tests and indices. The lab currently tests approximately 15 product samples per week. In addition, it periodically performs self-testing analyses for precision calculation and raw material samples. Each sample is tested for at least seven indices. During the implementation of the Seal of Quality program, the lab tested a total of 1,623 samples of dairy and meat products.

The laboratory staff has worked for more than two years to implement the Quality System ISO/IEC 17 025:2004. In April 2004, the lab applied for the accreditation by the Directory of Accreditation/Ministry of Economy. During this period an entire management system is implemented and the required lab documentation is developed based on the accreditation requests. The accreditation process was expected to be completed in second quarter of 2006.

Certificates of calibration are taken from the Directory of Metrology and Calibration for most equipment pieces at the laboratory.

The lab participated in international laboratory proficiency tests in 2005 and 2006 at an accredited laboratory in Ljubljana, Slovenia. Statistical calculations made by the Slovenian lab confirm that the Seal of Quality lab results are in compliance with reference samples.



Seal of Quality Laboratory

#### 4.11 Increased Access to Credit for Dairy and Meat Processors

Over 45 business plans have been produced for processors to facilitate access to credit. The Land O'Lakes specialists have prepared the documentation required by banks to receive loans. Under the Land O'Lakes agreement with ABA (American Bank of Albania), 18 loans have been provided to project clients, ADAMA members. A total of US\$ 732,000 was disbursed. The size of loans varied from US\$ 10,000 – \$130,000 and the loan term varied from 18 months to five years. These loans helped ADAMA members to upgrade equipment and improve production technology, responding to the increased market demand for high quality dairy and meat products. Table 9 shows the number and size of loans received by ADAMA members.

Table 9. Number of loans to ADAMA members

Nr.	Year	Processors	Amount (leke)
1.	2001	5	21,700,000
2.	2002	5	13,000,000
3.	2003	4	27,000,000
4.	2004	4	11,500,000
	TOTAL		73,200,000

In late 2004 and early 2005, the stellar loan repayment by ADAMA members suffered a setback. With the Land O'Lakes project closeout in sight, some farmers decided to slow down the repayment process. Collection of these loans was a lesson learned by Land O'Lakes, ABA, and ADAMA, as the existing banking, court, and bailiff system

was slow to respond. Land O'Lakes, ABA, and ADAMA put together a dedicated collection team and made huge progress prior to the LSC project close-down. With the Loan Guarantee Program management transferred to PShM, ADAMA will continue to collect upon the outstanding loans with its members.

#### 4.12 Increased Educational Opportunities for Dairy and Livestock Sectors

Multiple training sessions were organized throughout the Livestock Service Centers project's lifetime, in and outside Albania. The main goal of this activity was to improve technical knowledge of project beneficiaries and help them upgrade their operations and develop businesses. Appendix B has a list of trainings by beneficiary group.

The Tirana Technical High School Dairy Room and Tepelene Training Centers were also established to increase knowledge of dairy and encourage youth to pursue careers in this field. The Dairy Room at the Tirana Technical High School was established to meet students' need to practice their theoretical knowledge. The Livestock Service Centers project led the equipment selection, procurement and engineering. The Dairy Room enabled preparation of a high number of skilled workers for the dairy industry. This center has been used to organize training for project beneficiaries, ADAMA members, and other parties identified by partner organizations.

In cooperation with International Organization for Migration and at their request, a training session was organized for 13 female victims of trafficking. The training session focused on the following issues:

- Raw Milk Quality Control Tests
- Raw Milk Selection Based on Quality
- Milk Falsifications
- Storage Equipment and Quality

The Tepelene Training Center was established in agreement with the National Employment Service (Ministry of Labor). The main goal was to organize training sessions on dairy processing and create job opportunities, in order to reduce poverty and increase rural family incomes in five southern districts of Albania. Due to a decline in equipment utilization for training by local authorities, the Tepelene dairy processing line was transferred to Tirana for LEAA's business development activities. LEAA plans to set up an integrated training farm, which will help farmers increase their herd management techniques and produce value-added, specialty dairy products.

In addition, training sessions were organized with participation of 28 southern sheep and goat milk processors. The training covered the following topics:

- Raw Milk Quality
- Raw Milk Quality Control
- Equipment for Cheese Production

- Storing and Ripening Rooms
- Technology of Sheep and Goat Hard Cheeses
- Technology of Sheep and Goat Semi-Hard Cheeses
- Technology of Sheep and Goat Soft Cheeses
- Technology of Goat Fresh Cheeses

During the training sessions, 40 types of specialty cheeses were produced from sheep and goat milk.



Specialty Cheeses Produced at Tepelene Training Center

#### 4.13 Improved Credit Unions and Membership

Land O'Lakes started the Credit Union movement in Albania in 1996, in cooperation with the Irish League of Credit Unions. The role of Land O'Lakes has been to identify groups interested in establishing credit unions and to participate in the initial process of introduction and trust building. The first six credit unions in Albania were developed on the basis of the women's groups network already established by the project.

In 1999, Land O'Lakes started the implementation of the cooling tanks program and the establishment of the milk collection stations. Later on, the project intended to transform the milk collection stations into Livestock Service Centers where dairy farmers could be provided with several services. One of such service consisted of establishing credit unions around milk collection stations and provision of loans for credit union members. The rationale was based on the projected need for milk producers to obtain credit for agricultural inputs purchases. Since milk producers were receiving payments at milk collection stations, it was important to make the credit services available to them.

Starting in 2000, the Land O'Lakes Credit Union team established credit unions around milk collection centers. This work was completed through collaboration with the Irish League of Credit Unions and the AAATA/IFDC (Assistance to Albanian Agribusiness Trade Associations/International Fertilizer Development Center).

During the project extension, 15 credit unions were established in the districts of Lushnje, Fier, Berat, Korçe and Pogradec. They have been providing loans to members for various consumer needs. The loan size varied from \$300 in early stages of the credit union

activity to \$5,000 prior to LSC project closeout and the credit unions' transfer to Jehona Credit Union Association.

During the no-cost extension of the Livestock Service Centers project, the Credit Union team reduced its staff from four to two. The remaining team worked on consolidating the 15 established credit unions to nine. Three credit unions in neighboring areas of Korçe district and five others in Pogradec district were consolidated into two new ones.

The reasons that dictated the credit union consolidation process were the following:

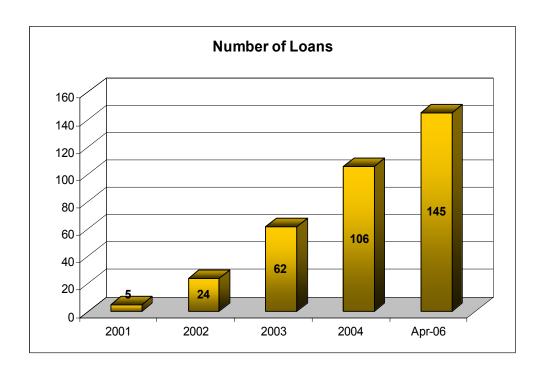
- Limited number of members
- Limited amount of assets
- Lack of resources to meet members' requests for loans
- Considerable expenses to maintain credit union activity

The consolidation process has positively impacted the following:

- Credit union strength and sustainability
- Critical mass of assets per credit union
- Reduced operational expenses
- Better response to loan requests
- Larger-size loans

During the 2000 - 2006, the credit unions provided 342 loans for members, totaling the amount of 22,823,200 leke as shown in the Graphs 13, 14 and 15.

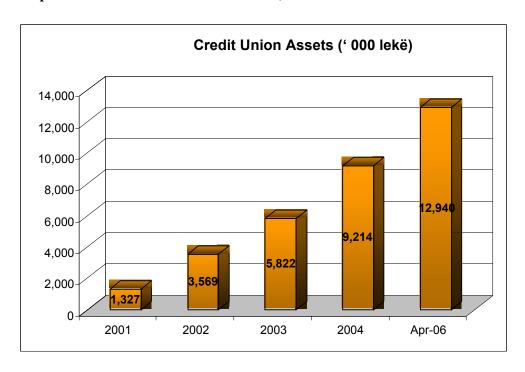
Graph 13. Number of credit union loans, 2001 – 2006



Amount of Loans ('000 lekë) 14,000 12.000 10,000 8,000 3,999 6,000 4,000 6,654 3,694 2,000 200 2001 2002 2003 2004 Apr-06

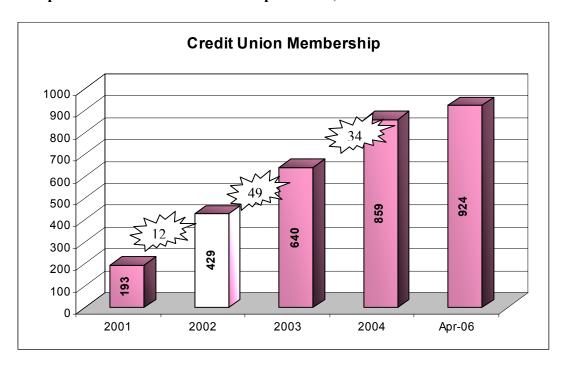
Graph 14. Value of loans increase, 2001 - 2006

Graph 15. Credit Union assets increase, 2001 - 2006



In 2000, Land O'Lakes' efforts were focused on credit union establishment, and the Credit Union team held a considerable number of meetings with dairy producers to explain the philosophy and goals of the credit union movement. In 2001, after the first

credit unions were established, the number of members started to increase on a yearly basis. The graph and table below show membership by gender, total membership and percentage of increase.



Graph 16. Credit Union membership increase, 2001 - 2006

The main goal of the credit union movement was to mobilize the farmers' savings and encourage them to work together on meeting their needs and improving life conditions. Most of the loans provided by the credit unions were used to meet members' consumer needs (i.e., house reconstruction, covering medical expenses, furniture or simple agriculture equipment purchases) and, recently, small business development needs. See Appendix B for a profile of two credit union members' stories.

**Table 10. Credit Unions** 

Village	District	Men	nbers	Deposits in Lek	Loans	s in Lek
		Male	Female	-	Number	Amount
Metaj	Fier	80	50	2.037.760	37	4.507.000
Gramsh	Lushnje	58	39	1.736.260	60	5.076.000
Ura e Kuçit	Berat	43	33	435.214	25	1.790.200
Bregas	Korçe	40	13	664.404	36	1.850.000
Shtermen	Elbasan	77	19	2.579.949	42	5.820.000
Starove	Berat	31	12	294.453	10	360.000
Leshnice	Pogradec	51	31	855.118	36	1.955.000
"Ylli i Kuq"	Korçe	30	40	562.235	30	745.000
"Mjelma"	Pogradec	193	84	3.305.740	66	4.380.000
TOTAL	9 Credit Unions	603	321	12.471.133	342	26.483.200
				(\$124,711)		(\$264.832)

During the LSC project implementation, the Credit Union team provided continuous technical assistance and training to the credit unions on the following topics:

- Credit Union History and Philosophy
- Board of Directors Responsibilities and Duties
- Treasurer Responsibilities
- Credit Committee
- Supervisor Committee
- Credit Union Statute
- Credit Union Law
- Bank of Albania Regulation
- Credit and Deposit Policies
- Credit Union Documentation

These training sessions, regional seminars and workshops were attended by 359 credit union members. The training was organized by the Credit Union team, in cooperation with the Irish League of Credit Unions and JEHONA Union.

Several training sessions and study tours have been organized outside Albania during the lifetime of the project:

- 2001 Training in Dublin/Ireland on credit union activities and operation, organized by the Irish League of Credit Unions with participation of the Land O'Lakes Credit Union team and nine credit union members;
- 2003 Training in Hungary on credit union activities and operation, organized by TESCO with participation of two Land O'Lakes Credit Union team staff and 16 representatives from credit unions;
- 2003 Training in Dublin/Ireland on credit union activities and operation, organized by International Fertilizer Development Center (IFDC) with participation of one Land O'Lakes Credit Union team staff.

The Credit Union team attended two technical training sessions on:

- Principals of Accounting
- Income and Expense Calculation
- Internal Financial Control
- Monthly Financial Balance
- Annual Financial Balance

#### 4.14 Increased Sustainability Through Coordination

Over the duration of the project, Land O'Lakes established a large network of project beneficiaries, dairy producers, dairy processors and meat processors. This expansive network serves as a ready-made conduit for networking, business development, and assistance from other Albanian and international development groups.

In order to effectively leverage other organizations' presence in the Albanian market and their expertise, the Land O'Lakes project collaborated with many other projects and donors:

- EDEM (Enterprise Development and Export Markets), USAID funded project combined efforts to support and assistance for the meat processing businesses on quality and safety issues.
- SBCA (Small Business Credit Assistance), USAID-funded project marketing and technical assistance on production of specialty cheeses.
- PShM (Partneri Shqiptar ne Mikrokredi), USAID-funded project Guarantee Fund, loans for dairy farmers and southern small dairy processors, ADAMA and LEAA members.
- ABA (American Bank of Albania) Guarantee Fund, loans for dairy farmers and processors, ADAMA and LEAA members.
- GTZ (German Technical Coordination Unit) Staff training on Quality Management Systems, common activities on "Food Safety," project clients training on quality and safety issues, fairs.
- World Learning, USAID funded project Training outside Albania provided to groups of dairy and meat processors, Land O'Lakes staff, Certification Board members on various training issues.
- FFP/IFDC (Food for Progress) Grant administered by LEAA on technical assistance to dairy farmers.
- JEHONA UNION Technical assistance provided to credit unions, common seminars and training provided to LOL credit union members.
- Ministry of Agriculture, Food and Consumer Protection continuous cooperation on several issues related to ADAMA and LEAA members' businesses, i.e. quality and safety, law enforcement, technology, marketing, livestock production, genetics, feeding etc.
- Livestock Research Institute close cooperation with the specialists of this Institute, development of written information, seminars, workshops and roundtables for dairy farmers.
- Veterinarian Research Institute quality and safety issues
- Institute of Public Health quality and safety issues
- Food Research Institute quality and safety issues
- Agriculture University of Tirana quality and safety issues, education process, TETRAPAK Dairy Book donation.
- Accreditation Directorate Laboratory accreditation issue.
- Standards Directorate quality and safety issues.

This collaboration among agencies and projects helps to increase the sustainability of the assisted businesses and multiplies the opportunities to them.

# **APPENDICES**

# APPENDIX A. Project Results by Beneficiary Group

**Assisting Dairy Producers** 

Description	Results
Semen imports and sales	112361 doses
A.I. network	120 technicians
A.I. training	57 technicians
Assistance to commercial farms	98 dairy farms
Imports of pregnant heifers	726 heifers
Dairy farmers training	844 farmers
Exchange visits and seminars	300 participants/10 events
Training in Macedonia	1 group / 11 farmers
Training in Germany	2 groups / 22 farmers
Business plans	60 plans
ABA loans	49 loans
PSHM loans	706 farmers
Livestock Service Centers	16
Symposium "Cattle Breed Improvement–Achievements and Perspectives".	
Workshop: "Association capacity building and strengthening"	
Workshop: "Strategy of association"	
Seminar: "Feeding of dairy cattle"	
Seminar: "Milking and milk hygiene"	
Roundtable discussion: "Corn for silage, its importance on animal feeding"	
Roundtable discussion "Livestock Management Law"	
Publications	25 brochures & 38 leaflets
Local TV programs	14
National TV program	1

**Assisting Dairy and Meat Processors** 

Description	Results
Milk collection stations establishment	69
Cooling tanks installation	89
MCS Training	70 managers
Raw milk quality training	2000 dairy farmers
Plants assisted	60 plants
GMP/GHP implementation	15 plants
Chemical users and sales	17 clients
SOQ program implementation	11 plants
SOQ certified products	30 products
GMP training	214 participants
Supervisor training	26 participants
South training (cheese)	28 participants
Outside training (Macedonia, USA, Poland)	46 processors
Certification Board training, Macedonia	7
Sales of SOQ products increase (leke)	52.3%
Sales of SOQ products increase (amount)	47.4%
SOQ consumer awareness campaigns	2
SOQ program – first research	21.3%
SOQ program – second research	48.2%
SOQ symbol – first research	26.2%
SOQ symbol - second research	55.1%
Quality Control Lab establishment	
Lab samples tested	1623 samples

Description	Results
Lab tests performed	11361
Business plan development	45 b.plans
ABA Loans facilitated	18
Number of products increase	17 – 50
Strategic marketing plans	9
Price point surveys	12
Distribution systems studies	6
Promotional activities	110 activities
Training centers establishment	2
Training on technology and marketing	594 participants
Training outside country	54 participants
Training trafficked women	13 participants
Dairy and meat EXPO	25 businesses
Quality & safety seminars	3 cities
ADAMA board training/Bulgaria	1 session
ADAMA Board training in country	2 sessions
Publications	13 books and 3 leaflets

**Supporting Credit Union Movement** 

Description	Results
Credit union formation	9
Loans to members	342
CU members	924
Training in country	359 members
Training outside country	28 participants

**Strengthening Dairy Organizations** 

Description	Results
Association formation (ADAMA & LEAA)	2
ADAMA members	33
LEAA members	200
LEAA board training in Albania	3 sessions
LEAA board training in Greece	1 session
ADAMA Board training in Albania	2 sessions
ADAMA Board training in Bulgaria	1 session
Lobbying VAT issue on Raw Milk	Removed
Milk Law	Approved by Parliament

#### APPENDIX B. Success Stories

#### Albanian Women in the Lead

Driving south from Albania's capital, Tirana, a remote road takes us to the village of Metaj. The village is located in the heart of what has become the most developed livestock area in Albania. Even though visiting the village of Metaj makes for a long trip, we are happy to take it because we are going to meet one of the most progressive farmers in the dairy network developed by the Land O'Lakes project. This farmer, Arsino Zaka, greets us with an energetic smile. Besides being a dairy farmer, Arsino is also a devoted mother of two children and a respect wife. Land O'Lakes has assisted over 8,000 female dairy and livestock farmers like Arsino in Albania.

Arsino has gained the ability to generate income for her family, assist other women, and lead the development of the dairy farming in her country. She was elected as one of the 85 leaders, who nationally represent 10,000 farmers in the dairy farmers' network. She was also elected as one of the project's key leaders who are responsible for transferring knowledge through training to women groups. She has been very active since the beginning, and is now, besides operating dairy farm, a manager at her local milk collection and livestock service center, a board member of the Livestock Entrepreneurs Association of Albania (LEAA), member of the Albanian Dairy and Meat Association (ADAMA), and treasurer of the Metaj Credit Union.

The Land O'Lakes project has helped Arsino and other women like her to increase their herd size and milk production, and, therefore income through assistance on feeding and management practices. Arsino is the owner of a four-hectare dairy farm and also rents three more hectares. She started dairy farming in 1990 with only one Simmental cow, producing 15 liters per day. She had inherited the cow from the former government-owned farm. She used about five liters of the milk produced for her family and sold the other ten liters. Before the project, she did not know much about dairy production and used to only feed her cows with alfalfa and lolium, via free grazing.

Arsino now operates a dairy farm that produces 200 liters of milk per dav. She also manages a milk collection center, which collects 1.5 tons of milk per day: milk not only from her personal farm, but from the whole village of Metaj. currently has 12 cows, three heifers. and two male calves and uses compound feed combined with free gazing, alfalfa, mineral blocks, and vitamins for calves and cows. Due improved feeding. herd management collaboration and



between the LEAA and World Wide Sires project, she increased production of her farm to 20 liters of milk per day per cow and sells the milk to a regional dairy processor. In 2000, Land O'Lakes also helped her set up a milk collection center serving the village of Metaj. Together with six other rural women, she manages the center and controls the raw milk quality, paying farmers based on the quality of their milk.

The milk price paid to farmers has been continuously increasing in her village from 4 leke to 20 leke per liter. To date, the price varies from 25 leke to 35 leke per liter (\$0.25-\$0.35 per liter). The price increase has a double impact: improved raw milk quality and significantly improved family incomes.

The milk collection center managed by Arsino and a group of women has also been transformed, through Land O'Lakes assistance, into a farm service center. Arsino is providing a wide range of services and livestock inputs to farmers around the area, such as vitamins and mineral blocks, California Mastitis Tests, compound feed, buckets, and disinfection cups.

In addition to her leadership role in the farming community and dairy industry, Arsino is the treasurer of the Metaj Credit Union board of directors. The credit union is one of the 15 credit unions established by the Land O'Lakes project. The credit union operates as a legal entity registered in the Tirana Court House and reports to the central bank of Albania. The credit union has 134 members who are mobilizing their savings and helping each other to grow their businesses, from poultry and agriculture to machinery and construction.

Arsino Zaka has benefited from the assistance of the Land O'Lakes project targeted to women. In turn, her family and village, as well as the dairy and livestock industries of Albania, have benefited.

#### Milk Collection and Family Incomes Increase, Business Practices Improve

The milk collection center located in Çerme village, Lushnje district, currently receives seven tons of milk daily from 1,000 dairy farmers in the communes of Çerme and Divjake. The center has three cooling tanks (two with the capacity of 1.5 tons each and the third with three tons capacity), a small lab to test raw milk quality, one plate exchanger with ice water to cool the milk and a big refrigerating milk transporter. The center is supplying raw milk to one of the biggest dairy processing plants in Kavaje district, Mireli Company.

When they started the business in 1995, the owner, Avni, and his wife were collecting only 600 liters of milk per day from 70 farmers around the village. In 1998, the owner started to work with Land O'Lakes and joined the Albanian Dairy and Meat Association (ADAMA). Continuous technical assistance was offered to him and, in the same year, two cooling tanks and a small lab were installed, the milk collection center was established and started to operate increasing the capacity to 2,000 liters per day.

The investment to build the center and make it operational was about \$10,000. In 2002, another \$11,000 was invested to buy additional equipment and increase collection capacity to 5,000 liters per day. In May 2005, the owner spent 23,000 Euros to buy a refrigerated transporter. To date, the collection capacity of the center is 7,000 liters per day. Milk price paid to farmers increased from 26 leke/liter in 1995 to 30 leke/liter in 1998 and 33 leke/liter in 2005.

#### **Collection Center Success At-A-Glance**

#### **Before**

1995 – beginning of the activity

- Collection capacity 600 liters
- Price offered to farmers 26 leke/liter
- Number of farmers served 70

The business was started at the owner's house door and milk was collected in plastic buckets and barrels, so hygienic conditions were very poor.

#### <u>After</u>

2005 – business situation significantly improved

- Collection capacity 7,000 liters
- **Price offered to farmers** 33 leke/liter
- Number of farmers served 1,000
- **Business profit** increased six times

A milk collection center was established in a separate building with three cooling tanks and other equipment including a quality testing lab. Hygiene and sanitation programs were put in place, and services extended to dairy farmers in two communes. Total investment of US \$21,000 and 23,000 Euros.

## Sales Increase as a Result of the Seal of Quality

Three years ago, Land O'Lakes began implementing the Seal of Quality (SOQ) program for dairy and meat processing plants. The short-term goals of the program were to improve product quality and safety, and stimulate demand for domestic products among Albanian consumers, with a long-term goal of opening the export markets to local processors.

The SOQ standards are voluntary and are more stringent than the state standards. To date, 11 dairy and meat factories are proud of their SOQ awards for a total of 30 products. The program is administered by the Albanian Dairy and Meat Association ADAMA, who routinely tests the products at their private laboratory. A publicity campaign educated consumers about the value of SOQ products.

GREAL and SOAL, the dairy processing companies in the districts of Korçe and Lushnje, received the SOQ award for their yogurt products. As a result, GREAL's sales increased in the first quarter of 2005 by 76 percent compared to similar period of prior year. The company's profits increased 68 percent. SOAL's sales increased 85 percent in the first quarter of 2005 compared to a similar period of the prior year and profits increased 71 percent.

The SOQ program begins with GMP (Good Manufacturing Practices), which requires improvement of the processing plants' hygiene and sanitation, plant layout, product and ingredient testing, water testing and other management issues. Once a plant has passed a physical inspection, additional assistance is given in marketing, packaging and labeling, product distribution and other quality and safety issues. Once a product is certified, the SOQ can be displayed on product packaging.

The publicity campaign educated consumers on the SOQ and encouraged them to buy SOQ products. As a result, market demand for certified products has increased. Processors with the SOQ continue to increase their sales and profit and expand their market opportunities. This has led to an increase in applications for product certification, both from SOQ plants who wish to certify additional products, and from new plants which do not currently participate in the program.

Through the implementation of the SOQ program, processors saw a direct correlation of profits and sales levels with product quality. They became more aware of the importance of standards for business growth, profit and market expansion. This process has a very significant impact on consumer protection and will prepare Albanian businesses to compete in international markets.

#### **Business Competitiveness Increases with High Quality Standards**

The MEATMASTER meat processing plant in Shkoder district started its business in 1993 with a small capacity line that produced a limited number of salami products. Through the Seal of Quality (SOQ) program of the USAID-funded Livestock Service Center project managed by Land O'Lakes, Inc., the company has been able to increase product variety to 75 products, grow export sales in Kosovo, and has earned ISO certification from the Italian Institute for Quality. The goal of the SOQ program is to lead successful processing companies through the process of developing their businesses in conformity with European Union legislation and procedures and help them increase their market share in-country and expand their exports.

In 2002, MEATMASTER joined the Albanian Dairy and Meat Association (ADAMA). ADAMA is an association formed by the Land O'Lakes project. ADAMA, with assistance from the project, administers the SOQ program. MEATMASTER was one of the first applicants to the program. Since joining ADAMA, the meat processing plant has received technical assistance from the project, including: business management, technology, marketing, equipment, training, and processing standards. The SOQ program aims to: a) implement quality and safety standards; b) increase business competitiveness; c) create consumer awareness increase toward safety and quality products and consumer protection; and, d) prepare local businesses to implement European standards and open export opportunities.



Meat Pasteurization Line Inauguration at the MEATMASTER Processing Company

#### Access to Credit: Changing a Farmer's Life

The Credit Union "Starova" was established in 2002. Today, it belongs to the consolidated credit union "MJELMA" in Hudenisht village, Pogradec district. The credit union has 277 members and has provided 66 loans to date, totaling 4,380,000 leke. Adriana Shkembi has been a member since the credit union's establishment. Adriana has been the key person and a great supporter who helped the credit union team gather residents and discuss the credit union idea. Since the beginning of the credit union activity, she served as the chairperson of the Supervisor Committee. She attracted many villagers to membership and contributed to strengthening of the credit union.

Adriana is dedicated to community development. She graduated as an economist from Tirana University. Adriana worked at the former agriculture cooperative of her village. During the transition years in Albanian economy, when cooperatives' work was interrupted, Adriana found a way to contribute to her village development: she started a small library to provide villagers with needed professional and fiction literature.

Recently, she received a loan of \$5,000, which she will use to reconstruct the library and expand her activity. The village residents frequently stop by to use her library. Adriana's small business is contributing in changing peoples' mentality and improving their understanding of business and life's problems, so they could find the right ways to solve them.

#### **Access to Credit: Business Development, Family Incomes Increase**

The "Metaj" credit union was established by Land O'Lakes in Fier district in 2001. At the beginning, it had only 11 members, who lived in the same village. At present, the "Metaj" credit union membership consists of 100 members from five villages of the Libofsh commune in Fier district. Gjena Tashi has been a credit union member since 2003. She was developing her small, family-owned chicken business. Gjena wanted to increase the flock size from 2,000 to 5,000 and expand her business, in order to secure higher income for the family and better meet villagers' demand for chickens. Recently, Gjena received a \$3,000 loan to upgrade the building and purchase 3,000 broilers. With income from her business, she makes regular loan installment payments, provides for her family, and develops a successful business.

## APPENDIX C. Training and Communication Materials

## Publications, books and booklets

- ➤ Insemination record books (500 copies)
- Farm production record books (500 copies)
- ➤ Artificial Insemination manual (500 copies)
- ➤ Hoof trimming manual (30 copies)
- Posters on compound feed importance with the slogan "Your cow in safety hands" and poster on imported Holstein cows (over 50 copies of each)
- Posters: "Corn for silage"; "Silage preparation", and "Silage in the feeding ratio" (30 copies of each)
- ➤ Brochure on calf monitoring (150 copies)
- ➤ Brochure: "Corn for silage" (1,000 copies)
- ➤ Brochure: "Dairy cattle practical feeding" (1,000 copies)
- LEAA association brochure (500 copies)
- ➤ TetraPak Dairy Processors Handbook
- ➤ Technical documentation of dairy processing units
- ➤ How to write a marketing plan
- ➤ Introduction to GMP
- > Food pathogens

- > Food hygiene
- ➤ Barn hygiene
- ➤ How to write a business plan
- Personal hygiene
- > Cleaning and sanitation
- > Introduction to GMP
- > Food pathogens
- > Path to Profit
- ➤ Cow's reproduction tract and cycle
- > Natural and artificial insemination
- ➤ Brucellosis disease
- Mad cow disease
- ➤ Alfalfa the queen of forages
- > TBC in animals
- > Reproduction in ruminants
- ➤ The code of practice in feeding industry
- Technical rules of milk equipment use
- Maize cultivation and its use in animal feeding
- Soybean cultivation and its use in animal feeding
- > Alfalfa cultivation
- ➤ AI manual
- ➤ After calving reproduction functions
- Quality Milk Production
- Practical Feeding of Dairy Cattle
- > Pastures and pasture plants

### Leaflets

- Compound Feed
- Brucellosis
- ➤ Alfalfa / fodder
- ➤ Animal reproduction
- Feeding of high-production dairy cows
- > Post birth cow feeding
- The incidence and prevalence of diseases
- ➤ Amino-acids the key of the balance feeding
- > Feeding of beef cattle
- Feeding of poultry in household conditions
- > Anthrax disease
- Cow breeds
- ➤ Milk fever
- Cow abortions
- ➤ Water drainage

- Annual fodder and association crops
- > Teat Hygiene and Milking Rules
- ➤ Foot Rot
- > Tympanitis
- > Feta cheese technology
- > Business management
- Procedures to receive imported cows
- ➤ Loan criteria and procedures
- Livestock equipment and their price
- Silage preparation
- > Hemogloburina
- > Ketosa
- Mastitis
- Diseases transmitted from animals to humans

### **Flyers**

- > Cow feeding before and after delivery
- > Hemoglobinuria
- > Chetosis
- ➤ Poisoning in cows
- ➤ How to produce quality milk
- ➤ Hoof trimming
- > Management of milking machine
- > Importance of artificial insemination
- Management and Marketing for Small Dairy Plants

#### Mass media

- ➤ National TV program on "Dairy cattle feeding" broadcasted at National Albanian TV and local TV stations (Lushnje "TV Plus", Shkoder "TV Shkodra", Korçe "TV Lobby", Elbasan "TV Dardania", Fier "TV AVN")
- ➤ Roundtable discussion on corn for silage broadcasted at Shkoder local TV
- Local TV program on animal feeding in Shkoder, Fier and Korce
- ➤ Local TV program in the Southern part of Albania on artificial insemination's importance, efficiency, and call for action to use artificial insemination for breed improvement.
- ➤ LEAA web page: http://www.livestockalbania.org

# APPENDIX D. List of ADAMA Members Assisted by Land O'Lakes

# **Dairy Plants**

	<u>Contact</u>	<u>Company Name</u>	<u>Location</u>	<u>Telephone</u>
1.	Egdi Gramo	EXTRAMILK	Tirane	0682032416
2.	Olimbi Ibrahimi	FERLAT	Tirane	0692073000
3.	Dorian Alla	ARBI	Tirane	0682033044
4.	Guri Lako	GREAL	Korçe	0682050777
5.	Fatmir Vogli	ANITAMILK	Shkoder	0682056533
6.	Naim Alijahja	NZI	Trush, Shkoder	0682302822
7.	Zef Dudi		Lezhe	0682182749
8.	Genc Raboshta	KLEGEN	Shkoder	0692031318
9.	Pano Bakalli		Shkalle, Sarande	0682294970
10.	Edmond Kaso		Zagori, Gjirokaster	0692360895
11.	Agron Basha		Lazarat, Gjirokaster	0692022124
12.	Idriz Zeqiri		Konispol, Sarande	+30973783895
13.	Selaudin Aliko		Tepelene	0692480405
14.	Shkelqim Muhaj		Permet	
15.	Nazif Tivari	MOZZARELLA	Shkallnur, Durres	0682474233
16.	. Aqif Çaça	MIRELI	Synej, Kavaje	0682025870
17.	Shaqir Lushkja	LUSHKJA	Kavaje	0682139181
18.	Hysen Koci		Hajdaraj, Kavaje	0682022587
19.	Sotir Velo	SOAL	Gorre, Lushnje	0682027522
20.	Arben Ndreka	LUFRA	Bishtqethem, Lushnje	0682041350
21.	Edmond Gjata	DELTADONI	Gorre, Lusnje	0682027195
22.	Isuf Bega	ERZENI	Somatice, Berat	0682242869
23.	Ilirjan Shameti		Vlore	0682129864
24.	Dhimiter Gucaj		Novosele, Vlore	0692099615
25.	Sadik Ballaj		Gjorm, Vlore	0692249866
26.	Shkelqim Xhafa	BLEDI	Kallm, Fier	0682207322

# **Meat Plants**

	<u>Contact</u>	Company Name	<u>Location</u>	<u>Telephone</u>
1.	Robert Bardhi	BARDHI	Tirane	0682037080
2.	Roland Arani	EKSPRES	Tirane	0682029077
3.	Kastriot Isai	ISAI	Elbasan	0692083092
4.	Nesti Tarusha	FIX	Korçe	0682050777
5.	Nikolla Tona	TONA	Korçe	0682050778
6.	Ndrek Kimca	<b>MEATMASTER</b>	Shkoder	0682013157
7.	Anton Kaci	ROZAFA-KAÇI	Shkoder	0692075557

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